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Dated: July 20, 2004

Signature:

*Gail Miller*  
(Gail Miller)

Docket No.: 65948/P036US/10315910  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Douglas O. Reudink et al.

Application No.: 09/422,210

Confirmation No.: 5254

Filed: October 19, 1999

Art Unit: 2681

For: HIGH SPEED FIXED WIRELESS  
VOICE/DATA SYSTEMS AND METHODS

Examiner: H. D. Nguyen

**RESPONSE TO RESTRICTION REQUIREMENT**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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JUL 26 2004

Technology Center 2600

Dear Sir:

In response to the restriction requirement set forth in the Office Action mailed May 20, 2004 (Paper No. 8), Applicants hereby provisionally elect the claims indicated by the Office Action as being Invention II, claims 25 – 31, for continued examination, WITH TRAVERSE.

The Examiner has required restriction between the following indicated Inventions:

Invention I. Claims 1-9, 11-24.

Invention II. Claims 25-31.

Invention III. Claims 32-37, 39-50, 52-64.

Invention IV. Claim 51.

The Office Action indicates that Inventions I and II are related as combination and subcombination; Inventions I and III are related as combination and subcombination; and Inventions I and IV are related as combination and subcombination.

Further, the Office Action alleges that Invention I contains claims directed to patentably distinct species of the claimed invention, indicating that:

- A) Claims 2-6 relate to control channel;
- B) Claims 7-9 relate to the controllable coupling circuitry;
- C) Claims 11-16 relate to the sequence/combination of antenna beams;
- D) Claims 17-20 relate to channel type; and
- E) Claims 21-24 relate to antenna type.

The Office Action also alleges that Invention III contains claims directed to patentably distinct species of the claimed invention, indicating that:

- A) Claims 33-37, 58 relate to controllable coupling circuitry;
- B) Claims 39-44, 59-61 relate to mutually exclusive antenna beam pairs;
- C) Claims 45-49, 62-64 relate to antenna beam pairs providing reduced signal quality; and
- D) Claims 50, 52-56 relate to channel type.

#### **Restrictions based on Combination/Subcombination**

As noted above, the Office Action indicates that Inventions I and II are related as combination and subcombination; Inventions I and III are related as combination and subcombination; and Inventions I and IV are related as combination and subcombination. Applicants wished to respectfully remind the Examiner that the second paragraph of M.P.E.P. § 806.05(c), provides: “To support a requirement for restriction, both two way distinctness and reasons for insisting on restriction are necessary, i.e., separate classification, status, or field of search. See M.P.E.P. § 808.02.”

Setting aside distinctness for the moment, Applicants note that specific reasons and/or examples with regards to the burden of searching and examining Groups I, II, III and IV have not been provided. This is contrary to the requirements of M.P.E.P. §803, which states that Examiners must provide reasons or examples to support their conclusions. Applicants respectfully contend that no reasons for insisting on restriction exist, as all the claims are drawn to systems and methods for wireless channel reuse, which are encompassed by the same field of search. For example, Applicants believe that a reasonable search for the invention of group I would overlap with the search for groups II III and IV, as each group has

common limitations such as multi-narrow beam antennas and base station circuitry or operation of such equipment. Therefore, Applicants believe that search and examination of the inventions of groups I, II, III and IV will not place a serious burden on the Examiner, particularly whereas the Examiner has already searched and Examined these claims, issuing the Office Action dated September 29, 2003. For this reason alone, the restriction requirement between claim groups I, II, III and IV should be withdrawn.

Additionally, the Office Action only provides purported evidence that group I is distinct from groups II, III, and IV. Applicants note that distinctness between group II and either of groups III or IV, or between group III and group IV has not been discussed by the Office Action. Therefore, Applicants believe that groups II, III and IV are not distinct from each other, and that restriction between groups II, III and IV is improper.

Further, as the Office Action points out, Inventions in a combination/subcombination relationship are distinct if it can be shown that “(1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations” (M.P.E.P. § 806.05(c)). However, the Office Action’s mere statement that “[i]n the instant case, the combination as claimed does not require the particulars of the subcombination as claimed” in relation to each of the combination/subcombinations fails to provide any evidence that the combination as claimed does not require the particulars of the various subcombinations as claimed for patentability.

Additionally, the “separate utility” alleged by the Office Action for each of the combination/subcombinations is merely a restatement of limitations present in the independent claims from each alleged subcombination. Applicants respectfully contends that a mere restatement of limitations of the claims of an alleged subcombination fails to provide evidence that the subcombination has utility by itself or in other combinations. Furthermore, as discussed in greater detail below, the alleged separate utilities advanced by the Office Action are flawed.

For example, in the discussion of the alleged Invention I / Invention II combination/subcombination the Office Action states: “The subcombination [Invention II, claims 25-31] has separate utility such as resource utilization solution dynamically

determines particular antenna beams and channels.” Alleged combination independent claim 1 defines a “base station system adapted to provide simultaneous reuse of channels” and recites “base station radio circuitry adapted for providing a plurality of discrete simultaneous communications.” Alleged subcombination independent claim 25 defines a “method for providing simultaneous reuse of channels at a base station” and recites “wherein said resource utilization solution dynamically determines particular antenna beams and channels for which simultaneous communications may optimally occur.” Thus, the independent claims of each of the combination and subcombination are directed to providing “simultaneous communications” and the limitation cited by the Office Action as a separate utility is not a separate utility but rather a step that may be used to accomplish such simultaneous communications.

As a further example, in the discussion of the alleged Invention I / Invention III combination/subcombination the Office Action states: “The subcombination has separate utility such as communications includes exclusion of other remote stations disposed in the same sector.” Independent claims 1, 32 and 57 of the present invention are directed to systems and methods providing reuse of channels. Independent claim 1 recites “a multiple narrow beam antenna system adapted to provide isolation of signals radiated therein, wherein sectors of said base station are associated with different ones of said antenna beams.” The alleged separate utility of subcombination of Invention III is a paraphrasing of an element appearing in each of independent claims 32 and 57 which recites “said provision of wireless communications to the exclusion of other remote stations includes exclusion of other remote stations disposed in a same sector.” Thus, the independent claims of each of the combination and subcombination are directed to providing isolation of signals in a sector such as through the exclusion of remote stations disposed in the sector. Thus, Applicants respectfully contend that the limitation cited by the Office Action as a separate utility is not a separate utility but rather a step that may be used to accomplish isolation of signals or the like through exclusion of remote stations.

As a final example, in the discussion of the alleged Invention I / Invention IV combination/subcombination the Office Action states: “The subcombination has separate utility such as communications includes exclusion of other base stations.” Independent claims 1, and 51 of the present invention are directed to systems and methods providing reuse

of channels at a base station. Independent claim 1 recites “a multiple narrow beam antenna system adapted to provide isolation of signals radiated therein.” The alleged separate utility of subcombination of Invention IV is a paraphrasing of an element appearing in independent claims 51 which recites “a multiple narrow beam antenna system adapted to provide wireless communications to base stations to the exclusion of other base stations.” The independent claims of each of the combination and subcombination are directed to providing isolation of signals in a sector such as through the exclusion of remote stations disposed in the sector. Thus, Applicants respectfully contend that the limitation cited by the Office Action as a separate utility is not a separate utility but rather a step that may be used to accomplish isolation of signals, or the like, such as through exclusion of some base stations.

For at least the reasons cited above, Applicants believe that restriction between groups I, II, III, and IV is improper. Therefore, Applicants respectfully request withdrawal of the combination/subcombination restriction requirements.

#### **Restrictions based on Patentably Distinct Species**

As noted above the Office Action has required further restriction between allegedly patentably distinct species within each of claim Groups I and III. As provided by M.P.E.P. §803, restriction is proper if two criteria are satisfied, namely that the inventions are independent or distinct, and that there is a serious burden on the Examiner. However, Applicant respectfully asserts that the present restriction requirement fails to satisfy these criteria for restriction with respect to the restrictions based on patentably distinct species.

As discussed in greater detail below, the claims of the various groups identified by the Office Action cannot be restricted as species. The inventions of the claims identified with each of the proffered species are not mutually exclusive of one another.

Applicants further assert that the Examiner has not properly established an election requirement as the Examiner has not addressed the second of the two criteria for a proper requirement for restriction (that there must be a serious burden on the Examiner if restriction is not required). As noted above, the claims of the present application have already been searched by the Examiner and an Office Action issued on the merits of the claims. Therefore,